NATURAL HAZARDS CONFERENCE

OPENING KEYNOTE ADDRESS

Keynote Speaker: Margareta Wahlstrom, United Nations Assistant Secretary-General for Humanitarian Affairs

How can we do business differently to get different results? What are the major challenges to behavioral change?

Institutes learn slowly, individuals learn quickly. Personnel learn and walk away from the institutions. There is a loss of institutional knowledge/wisdom. Major challenge is the institutions, how to build stronger institutions.

We are faced with an era where there is more focus in dealing with natural disasters, but we are institutionally fragmented. All the different disasters help us focus for a period of time and then our resolve of mind drifts away. How do we sustain the focus of decision makers?

Need to find leaders and champions. The international system is well established. There are accepted standards. They are forgotten at times. But, in general international disaster work works fairly well. Nevertheless, many countries are very reluctant to accept disaster relief. Whose responsibility is it to let following 'generations' know about the political decisions made before them that are impacting the current moment in disaster assistance?

Local response is always first, international. next. Generally there is great solidarity. But the ability to assist is sometimes turned into the RIGHT to assist. Offering of aid is important, but should not come with a degrading of the national authority. UN is much appreciated in disaster work, but not necessarily in humanitarian work outside of disaster work.

The system needs to be built stronger for ongoing attention after the news of disaster leaves the international consciousness. Many engaged actors: governments, private sector, UN agencies, civil society, military, media, Interpol, etc. Many want to coordinate, but don't know how. There may be more resources, but we're not sure of that. Financing for disaster relief has remained stable all these years. After events like the earthquake in Afghanistan or the India/Asia Tsunami, individual giving increases.

Development financing is increasing, but with caveats. Funds for specific issues, but not great for setting priorities.

Call for setting common standards and setting norms. Eg. The Lyon's Club is looking for how to participate internationally within global standards. UN is only a broker of alliances.

Institutions that are weak in many countries are pressured in a disaster. Disaster management needs to be organized, structured, but this is rarely a priority for countries with low economics.

Inequity: Major disasters can be quite well financed, but in smaller disasters in small regions become very dependent on international aid. In 2004 there were serious disasters in other regions before tsunami and they received no real attention. Long term crisis created by this overlook. Some in disaster management community say a little chaos is okay in the initial day. But this becomes very expensive in the longer term, if acting without direction.

Stable and well-structured government is the single most important factor. There are too many organizations after a large disaster like the tsunami. Eg. There were too many relief organizations in Sri Lanka needing the attention of a limited government. There develops too much friction between civil society (in the form of relief organizations) and the country's government. In Sri Lanka alone there were 500 organizations within first days, offering help and asking the government leader what they could do. Overwhelming assessment required of local government that didn't have the faculty to assess rudimentary conditions, communicate within its structure, let alone direct activity on the required scale.

Center for Humanitarian Affairs, UN was established in the 1990's to provide humanitarian effort following crisis.

The UN is secretariat to international search and rescue. The UN must supervise, not hold the capacity to respond fully within its structure. The Center for Humanitarian Affairs was created to facilitate cooperation between nations, advocate, coordinate.

Disaster assistance should be placed at center of UN attention. Wahlstrom stated the need for the help of our voices to continue to promote that. Disaster costs are increasing. Dollar costs are higher in richer countries. This does not paint a clear picture of the human toll. Typically in countries that are less wealthy there is little or no insurance, so the impact on individuals is much higher.

Look at 2004 tsunami. The financial loss was very low relatively, because the countries impacted were in an economically low state. Estimated at 10 billion US dollars. Thailand's numbers were larger, but they are insured. Impact on people in lower economic circumstances is devastating. Just the number of people killed will change these areas forever.

Will this trend continue? Yes, what will happen is that originally you engage in disasters for humanitarian reasons, but beginning to understand economic impact and social impact. Political impact is also great. Disasters impact the economic, social and political structures of the world. Eg. Swedish impact in tsunami was large because there were many Swedes who felt that they or their family were deserted by the Swedish government. Their leadership had been presented several times with prevention disaster plan which was turned down. The Swedish people were very aware of this oversight and it impacted directly the political decisions being made following the tsunami.

Perception is that the poor are more impacted by disasters. Yet the middle class is also impacted devastatingly, but they have networks and resources like insurance and education. The poor are impacted more for the long term. Not all people benefit after disaster from the aid and other changes that can result.

Increase of disasters: coastal growth, urban growth. 75% of earth's population impacted by disaster ultimately. How do these things impact government decisions? In China, their government will not recognize needs created, for instance, by over mining. Population in one locality was being harmed by coal dust, trucking, cave-ins under their homes, but told that there was nowhere to relocate.

We have much knowledge, with much practical insight. How do we translate into practical application? We knew the risks, but where are missing links in tsunami, Katrina, etc. In '70's there was a system to anticipate drought. Development people think that emergency people are cowboys, emergency management people think that development people can't see what's going. Early warning system was not maintained and the system of measurement was measuring the wrong thing.

Turn to using local knowledge and pre-empt disasters so that we might respond less. Invest in preparedness, in risk reduction. Solutions that are offered don't need to be sophisticated: but the links between the people who have the information and the people who need it is weak.

Emergency Reduction Unit: trying to get government to react more timely and effectively. Help local government be ready to take action. First responsibility belongs to the country, with UN acting on behalf of building alliances and political will to cooperation. Better and stronger networks for sharing. Use abilities to full extent.

Q & A

Economic Costs – to what extent is there cooperation between governments and private sector?

Government expects money and private sector expects recognition. But, most important investment they can make is in investing in building infrastructure and recovery. What happens after is really the important aspect.

What can we do to address the financial imbalance in UN budget?

UN can't do everything is the first point. The UN has a response fund of 500 million dollars, a very minor amount of money. Most have larger budgets for response. Would like to see institutions established for rebuilding infrastructure within countries devastated by disasters.

Displacement is challenge, what can we do?

Much displacement is result of people living where they "should not" be living. They will mostly return and gradually rebuild. The UN and many other governments are well placed to conduct a dialogue about how to help long-term displacement. There are not statistics for the numbers of people displaced from development projects. Avoid putting all "displacement" in same category. We should put our efforts into supporting the governments' efforts to place people in best geographies.

PLENARY #1 RECOVERY AFTER KATRINA Monday, July 10, 2006

Moderator: Clancy Philipsborn, AMEC Earth and Environmental, Inc.

Discussants: Paul Farmer, American Planning Association: Shirley Laska, University of New Orleans: Victoria Salinas, FEMA/Gulf Coast Recovery: Gavin Smith, Mississippi

Governor's Office of Recovery and Renewal

Katrina was a fascinating disaster in all its implications. Tremendous effort throughout gulf. Most with embarrassing results.

PAUL FARMER:

Louisiana culture: family matters, church matters, but civic interests don't and government doesn't.

Disasters don't make us any smarter. We'd like to think they do, but we're not made smarter immediately. Values don't change. Brief change with humanitarian thoughts, but soon agendas surface as main points of discussion. Power relationships are magnified. Don't keep sending people down here who want our time, researchers, press, planners.

Planning matters. Comprehensive planning matters. Very few produce standard hazard plans., even those that comply with the Miitgation Plan. Easy to make government fail, hard to make it succeed.

Recovery planning: Have a long way to go with catastrophic disasters. International Community was amazed that we did as poorly with Katrina as we did. The area destroyed was the size of Great Britain. Continuing disconnect. Louisiana now has a building code. Mississippi has codes in impacted areas. Inequity between states from a planning perspective. No gates at Lake Ponchatrain – funds had not been used as designated.

Low lights:

The FEMA we all knew didn't show up, as an organization it was politicized. New Orleans had a dysfunctional government before the disaster for decades, why would we expect a change. Planning Director of city of New Orleans had never had a meeting with the mayor, still hasn't had one as of May.

High lights:

Federal funding. Polarized Congress, yet were able to fund. Blanco did well with funding. Gov. Gavin showing leadership in Miss.

New Orleans: Port, tourism, fishing, petroleum. Port and petroleum are highest economic benefit. Tourism and fishing less. 10% of local business back. Of those destroyed, virtually none were restored.

Investor confidence has to be restored.

Leaders need to be honest – not everyone wants to come back. New Orleans will be a much smaller city. Better metropolitan capacity, don't keep trying to fill wetlands. Need local capacity. Professional city staff is much reduced. No planning capacity.

Institutions have done strange things: Tulane eliminated civil and environmental departments.

Interest deductions for home mortgages. We give second loans in hazard areas. This is an easy win.

DR. SHIRLEY LASKA (Univ. of New Orleans: CHART)

Goal: Collaboration with coastal Louisiana communities to improve response to natural hazard.

Means: Applied research – collaborative best practices development and transferal.

Natural Hazards Observer: Vol. XXIX no. 2 November 2004

Disasters Waiting to Happen...Sixth in a Series

"What if Hurricane Ivan had not missed New Orleans?"

Five Catastrophes of Katrina

The first Catastrophe: Pre-Storm conditions
Harming Environment rather than living within it
Failure to managing Risk

I. The Recovery Enterprise

A. The large international firms were given the largest contracts. Was this appropriate? Yes, there are some aspects where this is essential, but regional corporations had capacity to do the work

National versus Local Firms?

- 1. Capacity to do the work
- 2. Most cost effective: how many layers taking profit?

- 3. Legacy to area in contribution to economic recover and
- 4. Legacy of future recovery capability
- 5. Lesson: Develop and use "local benefit" test when determining at which level we hire for recovery process.

Citizen as Resources:

Mayor said he had a plan and said he'd have it in December.

Is neighborhood "active" enough to be saved.

Planning Process – Vietnamese Planning committee. Broadmoor Neighborhood Assoc. STAR INDIVIDUAL RESOURCE is director of Broadmoor

RESIDENTS AS RESOURCES

- 1. Honor the role of residents: instills trust, use of local knowledge and energy
- 2. Engage immediately
- 3. Support process (\$\$)
- 4. Hold true to involvement when big dollars press for exclusion
- 5. Likely if not done that you will have loss of citizenship

INEQUITIES, DISTRUST AND RECOVERY

- 1. Housing Public/Rental Housing: 7,500 pre-Katrina public housing units, about 5,100 occupied
- 2. 1,000 open June, '06
- 3. Rentals units: Tens of thousands destroyed

WILL BE reduction of footprint of returning population

www.nol.com/katrina/graphics/flashflood.swf

Constantly 200,000 \$ is being wasted because of leaks, utility and public service reduced.

PREPLANNING/COMMAND & CONTROL/SPONTANEEOUS EFFECTIVE RESPONSE

Plan put in effect before participants were asked for building support from stakeholders.

Conversation has been that it's more important for community to be in position to preplan. If we advocate spontaneous response, then ironically perhaps we need to preplan effectively for spontaneity. (Can we plan for organic outcome?)

Evacuation:

- 1. Engage stakeholders to determine effective options
- 2. Develop fully organizational recovery
- 3.

Cultural rituals are essential to every community. Know our rituals and know what gives comfort. This will empower psychologically.

VICTORIA SALINAS

Long-Term Community Recovery Planning Facilitates the Return to a "New" Normal Community Progress

Emergency Support Function 14-Long Term Community Recovery

What is LTCR?

Purpose – coordinate federal activities and resources in support of state and local recovery planning efforts (NRP)

LTCR provides:

Planning framework
Needs assessment
Planning assistance
Implementation support
Vehicle for coordination among federal agencies

Aids the community in developing a recovery plan focused on projection...

National Response Plan establishes ESF #14 – LTCR (FEMA is the lead agency)

FEMA as the lead can:

Convene Federal Agencies Mission Assign Hire Staff (PA-TAC, local hires, DAE) Use Disaster Relief Funds for purposes authorized

www.louisianaspeaks.org

Click on: "Parish Recovery Planning Tool" button sponsored by FEMA and the Louisiana Recovery Authority.

Effort to make a web based recovery planning into a virtual interactive forum.

Louisiana Speaks hosted simultaneous open house events in 40 cities across the US – an opportunity to reach almost 80 percent of the displaced residents - Diaspora.

How well did FEMA and Other Federal Agencies support community recovery?

Value – Compelling purpose – Support from authorizing environment - Capacity to do the work.

National Response Plan

NRP provides unclear guidance on the purpose of ESF – 14

NRP excludes economic policymaking and economic stabilization, but requires that LTCR efforts be forward- looking and market based, focusing on permanent restoration, housing and the local economy.

Comprehensive Planning?

Transitional and Long Term Housing Planning?

Joint Field Office

Relationship to FEMA programs Financial oversight?

Tension between Planning frameworks and community planning process

Coordination vs. Planning

Standard operating procedures, concept of operations

Staffing

ESF-14 Cadre Necessary Training EMI

Multiple mandates on our government institutions.

Integrating FEMA programs with local programs and efforts is a challenge.

GAVIN SMITH

Hazards research and applications Workshop

Proposed model of Disaster Recovery and It's Application following hurricane Katrina

Work taking place in Mississippi is focusing on ESF – 14

Sustainable Development:

Proposed model of Disaster Recovery:

Disaster characteristics

Pre-Disaster, Community- Level Contextual

Disaster Recovery: The differential process of restoring, rebuilding, and reshaping...

SUSTAINABLE DEVELOPMENT POST-DISASTER (say, "building it better")

Role of Design in Recovery

Rapid delivery of Housing

Transitional housing – alternative to FEMA travel trailer Mississippi cottage

Modular, panelized, kit-based contruction

Recapturing Coastal Architecture

Pattern book for gulf coast neighborhoods

Coastal Construction

Coastal construction Manual Mitigation Assessment Team

Working hard to recapture architectural history. Worked with cadre of architects and historians to put together materials that encourage history.

Role of Design in Recovery

Transitional Housing: Mississippi Cottage
400 Million Dollars
Replacement of Travel Trailers
38,241 temporary housing units
The Katrina Cottage – example

How do you blend engineering and architecture?

Role of Planning in Recovery –

Best Document: "Building Back Better Than Ever" Leadership corporate executives. Engaged in a hands on business oriented attitude. Jim Barnsdale, Creator of Netscape. Funded privately

www.MississippiRenewal.Com

"Smart Code" Governor's Office of Recovery and Renewal

LEADERSHIP IN DISASTERS Monday, July 10, 2006

Moderator: William Massey, Dewberry & Davis

Discussants: William Carwile, Naval Postgraduate School: Frances Edward San Jose State University: Richard Rotanz, Nassau County Office of Emergency Management:

Stephen Sellers, California Governor's Office Of Emergency Services

BILL CARWILE

Military background, with FEMA Pacific Area. Category 5 in Guam. FCO Mississippi.

Did not perceive failure of leadership in Mississippi, saw it in Louisiana.

What's the difference between leadership in a disaster and a catastrophic event?

Public Messaging (settling objectives and explaining them)

Managing shortages – requires establishing priorities

Leading in an intergovernmental and interagency environment – Federalist system In south very local based – county even over state, even city over state. Strong sense of decentralization.

Incident Command System:

Unified Command – couldn't get a unified command going in Louisiana – this is where quick response leadership becomes essential. Only part of ICS.

What is Unified Command?

A mechanism, within ICS, to define and achieve a set of objectives when there are two or more political or functional entities that have authority and/or assets.

Summary of Lessons Learned:

"Typing": We need to standardize leadership. Type I FCO (Federal Coordinating Officer) for specific type of disaster. Gives standardized processes. Interchangeable leadership based on credentials and Typing.

What matters is having leadership and having access. Access is huge. Governor Haley Barbour utilized access to White House daily and it was essential to Mississippi's successes.

FRANCIS EDWARDS

All disasters are local. Comes down to officials being responsible and accountable to their local people.

Strongly held perspective: Believes that Homeland Security is subset of Disaster Management, not the other way around. Creation of Homeland Security was its own disaster. Institutional wisdom was downgraded – Homeland security is about human crime. Natural Hazards are obviously not human caused crime. The paradigms are all wrong for disaster management.

Katrina shocked us all with the outcome. Didn't work this time because it wasn't simply a hurricane, it was a storm surge. Hard to understand the ultimate outcome even though there was knowledge about a likely outcome.

We saw an untrained politician trying to do the job of a trained emergency manager. The politician would not yield to the professionals. Historic precedence. But now have Principal Federal Official (PFO) as a result of the National Response Plan and a Federal Coordinating Officer (FCO) the historical FEMA appointee and their roles are not understood.

A military response to natural disaster is foolish. Won't work on many levels. Our water buffaloes that were used in Northridge Earthquake response were in Iraq during Katrina.

Why don't we have enough money in California? Prop 13.

MPA program in San Jose in Emergency Management. Informal poll of 300 emergency managers – public policy knowledge, management skills – be a generalist with a specialty in emergency management.

RICHARD RATANZ

It is common not to have designated emergency managers across the country in local governments.

Can be successful as a political appointee if you gather a team of skilled emergency managers. Politicians may have access higher up the chain. Seems to work that you have someone who has come through the ranks and have vision for where system needs to go and innovate.

Need to understand the system – politics, finances, managers, technologies, agencies and how they interrelate. Have to understand the complexities and leaders need to have a broad view. Should have ability to work up and down the line of authority.

Emergency Manager Funding - Need strong leadership to establish household preparedness, city, corporate, on up line in gov.

STEVE SELLERS

Knowledge – emerging area of study. The more we can professionalize the better off we are. Idea of having advanced degrees seems very good.

Experience - you really do need experience. There is no comparable management experience to managing disasters. Looking at Katrina makes Steve and Rich say, "Are we ready to handle a catastrophic disaster?"

Emergency Manager in California must have national presence, disaster experience, ability to martial state population, management team attitude...

Array of management teams. Need interpersonal skills. Must have people skills, can only grate against people for so long before you become ineffective. Collaboration skills, must be face to face. Management by objectives. Use of authority to make it happen. Vision drives an organization. Must be outcome based. You need people to follow you where you are going.

Political process critical. The governor will get who he wants and the legislative process is usually more of a coronation.

NEMA having more weight in decision making processes. As well as California Emergency Services Association. Oversight over the process isn't what it once was, until after a Disaster of large scale, becomes a political apple.

Funding goes to Homeland Security.

Recruitment: what attracts a good leader? Not the money, not financial compensation. When he was coming up through ranks it was public service. Young people now want tangibles. Political payoff?

Education background is important. Can be experiential. Could be temporary hire for FEMA. Work for an effective leader, even in volunteer capacity.

Discussion:

Offer emergency management at all university campuses that would operate as a minor for all relevant fields. Don't try to train in emergency management, ill-equipped RATHER in an interdisciplinary environment. Essentially could be a single 3 credit course. Funds are jealousy guarded in each department and don't want to absorb the cost. Offer a campus wide course that anyone in any discipline could take.

Arkansas Tech does have a stand alone course that's offered. Not just FEMA oriented but business continuity.

Leadership: the ability to get the folks you're leading to do more because you are there.

Locals often get going cooperatively. Leadership should assist them, get out of the way and get others to leave alone those who are already being effective. Almost always a post-disaster issue to manage un-asked for volunteers. Should FEMA have a volunteer coordinator? Must be able to create a sense of unified mission. Must be able to assess secondary hazards.

International Association of Emergency Managers – local managers.

Typing: education, experience, skill sets.

Emergency Managers: "true believers." People who are wired already, who carry their blackberry, who are efficient, quick. Adaptability to use technology, but only if have good people skills.

Need for education to local authorities about what emergency management is really all about. Folks don't know that it's not primarily a military, police, fire mind set. Need to understand the aspects of funding, planning, mitigation, recovery.

People who have come up through the ranks may know how to do a PW, but may know nothing about federal standards, policies, constitutional issues for states and local governments.

New Zealand is breaking the military mold of emergency managers.

How are we going to raise the next generation of emergency managers?

RESEARCH IN HAZARDS BY YOUNG PROFESSIONALS I Monday, July 10, 2006

Moderator: Nicole Dash, University of North Texas

Presenters:

Lindsey Barnes, University of Colorado, "Public Perceptions of Flash Flood False Alarms"

Aurelie Brunie, University of North Carolina at Chapel Hill, "Community-Based Preparedness: The Role of Social Capital and Middle-Level Institutions"

James Goltz, California Governor's Office of Emergency Services, "Emotion and Disaster Response: A Sociological Assessment of Feqar and Human Behavior during Three Damaging Earthquakes"

FALSE ALARM CONVENTIONAL WISDOM Denver 2005 Flood Plain Survey

Cry wolf effect -

False alarm effect – Breznitz 1984

Respondents not less likely to respond (Dow and Cutter 1998)

Survey questions;

- 1. Realizing it's difficult to predict flash floods, I would prefer more warnings even if there are more false alarms or close calls. 78% agreed In relation to gender both male and female would prefer more warnings, more women 83% to 77% Age factors had older residents preferring alarms.
- 2. One or two false alarms would reduce my condidence in future warnings." Most disagree, more women than men. Age factor was more likely to disagree.

Conclusions:

People would rather have more warnings with the possibility of a false alarm or close call.

False alarms may not reduce confidence in the warning process.

Demographic characteristics do matter:

Gender: females may be more tolerant of false alarms. Women may have a higher risk perception.

COMMUNITY-BASED PREPAREDNESS: THE ROLE OF SOCIAL CAPITAL AND MIDDLE LEVEL INSTITUTIONS:

The Problem

Community disaster preparedness...

Social capital: features of social organization such as networks, norms and social trust that facilitate coordination and cooperation for mutual benfit. (Putnam, 1995)

Social capital still not enough. Disaster Preparedness Capacity-building Community Social Capital Middle level Institutions

RESEARCH: Looked at Dominica – island in Caribbean Sea Island split in 7 different districts. Officer in charge of community is in charge of emergency management.

Used community-level measure based on a locally relevant scale

Koud-mai = means "self-help" in Creole Tradition of interhousehold exchanges Used by the Church and foreign agencies Welfare state and rising expectations

As a result of vent of roads, TV and radio the raised expectations of population, soon after independence in 1980's people became more dependent on the state. Decline of Koud-mai.

Community level: organizational preparedness

Household level

Multi-level regression analysis Community level predictors Household predictors

Preliminary Results

If a hurricane was expected to hit Dominica what would your household do to prepare...

Summary:

Social capital does matter, but different capital matters in different ways. Factors to consider – family, community relationships, attention to media, religion (fatalism – disasters are God's will, no need to prepare, but rather to accept.)

EMOTION AND DISASTER RESPONSE: A SOCIOLOGICAL ASSESSMENT OF FEAR AND HUMAN BEHAVIOR DURING THREE DAMAGING EARTHQUAKES

Jim Golz, PhD

Behavior in response to a major earthquake will invoke the expression of emotion.

There will be both positive and negative emotions expressed.

The positive emotions (eg Compassion) in the context of post – EQ altruism are well-documented

Negative emotion of fear less well-examined.

Modified Mercalli Intensity Scale 1931 (Left behavioral components)

Have measures of intensity.

- 1. Not felt
- 2. Felt indoors by few especially on upper floors or by sensitive or nervous person.
- 3. Felt indoors by several
- 4. Felt indoors by many
- 5. Felt indoors by practically all
- 6. Felt b y all indoor and out doors.
- 7. Frightened all general alarm, all ran outdoors. Some or many found it difficult to stand. Noticed by those driving cars.
- 8. Fright general Alarm approaches panic. Disturbed persons driving motor cars.
- 9. Panic General

Quote from "Elementary Seismology" by Charles Richter:

"Fright and panic are such regular effects of strong shaking that they form an established part of all intensity scales. Persons and populations differ according to their different experience, but only an abnormally cold-blooded person can remain calm when the structures over his head are being damaged and the ground under his feet is shaking so as to destroy the basic feelings of security. The most universal impulse is to run, even when already outdoors."

Data and Samples:

Three earthquakes: Whittier Narrows, Loma Prieta, Northridge

Question on fear asked in all three using identical wording:

"Thinking back to your feelings and experiences during and immediately after the (location, date, earthquake) which did you experience?"

Kemper (1978, 2000) holds that emotions are products of human interaction in which power and status are exercised.

Extrapolation to EQ disaster:

Lower status groups will experience more fear?

Fear:

Who's afraid?

Higher levels of fear were expressed by women, foreign born, younger, low income, presence of dependents, people not confident in their preparedness.

Tentative conclusions:

Fear very prevalent in all three EQs

Both situational and demographic variables were salient

Fear was related to physical movement, more likely to "do something with their feet." The fearful moved from where they were, while the less fearful remained in place. Taking cover, very fearful. Those who ran outside was only 8% - panic?

Fear is related to physical movement during the EQ. Fear is associated with movement in general, other factors are more salient than fear in influencing specific behavior in EQs

Role consistency between disaster and non-disaster situations. This study suggests that status and power relations that prevail in non-disaster situations may carry over in to the immediate disaster period as they affect (trigger?) the emotion of fear.

Conventional wisdom that identifies fear with panic is not supported by this research. Fear appears to put people in motion but other factors influence the locational or situational objective of this movement. The frightened were far more likely to have taken cover than run outside.

Fear according to gender. Women report more fear.

Additionally, if you have more stuff may be less concerned about stuff because you have insurance, etc.

DISASTER JOURNALISM Tuesday, July 11, 2006

Moderator: Marguerite Moritz, University of Colorado at Boulder

Discussants: Amanda Ripley, Time Magazine; Rebecca Solnit, Independent Consultant;

Lee Wilkens, University of Missouri

PROF.WILKENS

Outline normative assumptions –

We live in a democracy. It accepts that institutions have a rule in governance. Burke (1700) "the fourth estate." Journalism is a public trust and a service.

Briefly review social science -

News media plays two distinctly separate roles:

Warning role: Missouri, tornado alley, media very effective in warning, precise, coordinated with National Weather Service. Coordination doesn't always match NOAA. Other sorts of hazards more difficult to warn. But, media warnings of hazards and disasters don't use robust, accurate language. Try to warn, but could do better at communicating expert opinion.

Journalism comes under same sorts of stressors in a disaster:

Adopt "command" point of view. Ask the officials opinions, etc. Puts a "lens" on the story.

Omits the "citizen first" responder.

Functions as a community bulletin board. On a crawl on TV screen are local facts: need for hospital personnel to report, cancelled school... Tend to run unfiltered, assumption of truth. Multi-tasking.

Checks and balances in disaster go undone. Staffing and stressors. Ie. Bicycle journalists in Katrina – head out on bike, come back to news room with what saw.

This obviously leaves out the larger policy questions/context, if framing the story in terms of "victims."

Sometimes public officials feel that the media is a one-way conduit. Journalists believe it is a conversation. Not a one-way flow.

In first two phases, media and response teams have same agenda – to save as much life, etc. as possible.

Not objective.

Provide suggestions to journalists not in this room.

The paper, Times Picyune, set up a rumor desk. Began to report rumors and said "we can't confirm."

What do we do when the command post is inaccurate or worse are lying?

Broadcast journalists were able to address this with split screen. Gave a visual image that contradicted the "official" information coming from the command center.

Internet has opened the response factor from those who vehemently disagree.

AMANDA RIPLEY

In homage to Dennis Maletti-

Why are reporters such morons?

We assign their mistakes to ratings. Ignorance may be the better answer. They may not know more than the average cop on the street. If it were simply market forces, we would be in worse shape. If it is ignorance, then there's something that can be done.

Most useful from the conference were the contacts in back of Natural Hazard notebook. Knew after Katrina that it was preventable, had been predicted. Helped make good decisions after the disaster. Every time there's a disaster there are reporters...

How can we make them smarter?

Invite journalists, reporters, news outlets, etc. Tell the media that they can do a more effective job in the next event. Give them data, credible information, research papers.

If work for a government agency, consider embedding reporters.

PR people were contacts at FEMA. At the 'journalist house' in Katrina was a note board: Next to names of FEMA contacts had written "hates us," "hates us like we shot her dog."

Amanda was embedded for a day with Admiral Allen. Wrote a story, "How the Coast Guard Gets It Right."

Why bother doing all of this?

Time pressure on reporters that interfere with "getting it right." Disdain we feel for reporters is similar to disdain by Bush Admin. To reporters and scientists, etc. Solution to disdain is not distance. Get close, build relationships.

REBECCA SOLNIT

Disparity between what happens on the ground.

"Witness" mentality seemed to take the place of essential journalistic perspective. Journalists are caught up in the same kind of chaos. Fascinating to watch journalists who have lost their veneer.

Seems to be biases, very hard to dismantle the myths.

MODERATOR

Interviewed 20 journalists after Katrina. Consensus she came away with was that they really wanted to get it right.

Does the panel see a difference between 911 and Katrina?

AMANDA

With a terrorist attack there is an external enemy. So focus is unity, not poitical so much as an ongoing external focus

Natural Disaster there is a sense of focus on internal structures – political, community, local.

Times Picyune only had the web for Tue, Wed, Thur. and no print copy.

Interesting side-effect of Katrina was that journalists began to question Bush administration in ways that hadn't happened since 911.

Questions:

In a somber way people feel enlarged in some way by disaster – not the disenchanted shopper... Brings meaning into the boring routines of daily life.

Suggestion: web-site for journalists that includes access to social scientists.

Empirical evidence to suggest that the institutions of media may actually appreciate death and destruction as a ratings boost. They may "not like to see" people get hurt and yet institutionally they are promoting images and stories of violence. Increase in violence reporting in media, was actually contrasted by decrease in violence statistics in '90's.

Eric Holdeman at Eric's Corner – King County, Washington. Has 300 media contacts who have lists of professionals in the field.

Did you think the coverage of Katrina was racist?

The word looter was used less after a discussion began on-line on a journalism web-page. Unintentional, need for education, information.

THE MISSING LINKS: WHAT MUNICIPAL MANAGERS NEED FROM THE HAZARDS COMMUNITY

Tuesday, July 11, 2006

Moderator: William Waugh, Georgia State University

Discussants: Sam Mamet, Colorado League of Municipalities; Mark Ruzzin, City of Boulder, Colorado; Marg Verbeek, International Association of Emergency Managers

What are the biggest issues facing local governments today in managing known hazard and preparing for potential disasters?

Where do local officials find information on managing hazards and preparing for disasters? FEMA, state EMAs, ICMA NACO, other professional associations, disaster research centers, or other sources?

Is disaster research useful to local officials and, if not how can it be made more useful?

What are the major unanswered questions that disaster researchers might address?

Are local officials willing to facilitate research efforts to find answers?

SAM MAMET

Colorado is small town state. Issues like disasters will not be anywhere on their radar until it hits them between the eyes.

Inter governmental cooperation. Mutual aid agreements, many dictated by state law. How often are these things examined? Not often, but they are there, at least, to be put into place when needed.

Land Use Planning – in Colorado have broad legal framework for land use decision. Very locally based, however within broad framework.

Part time elected officials with full time staff. National League of Cities. Work through the upper levels of associations, it will filter to many lower local municipalities.

Interact with state also relevant just as interaction with FEMA.

MARGE VERBEEK

Emergency Managers on the local level have no political clout whatsoever. Not within city, county, state, nation. Have no real access. Always grappling with adequate funding – great need for public education, training for staff within local government. Trying to find champions within own sector to help them do their jobs.

Need continual feed back as to whether their efforts outside of disaster event are effective.

Personal contacts are important, making practical alliances with people within a network. There's not enough research, should be more pressure on them to work with researchers.

International Association of Emergency Managers (IAEM) – needs to interact with more researchers. We don't look at lessons learned. Establish minimal level of information necessary to execute good effort in a disaster.

During a disaster – how to take assessment of event and resources and implement action.

How to build HIGH PERFORMING TEAMS who fair well in any kind of disaster, but especially in Catastrophic Disaster.

Local officials are willing to facilitate research efforts.

Marge sends out presidential bulletins about emergency issues via e-mail and draws attention to membership of important research data.

MARK RUZZIN

Mayor of Boulder

- 1. Funding. Never enough money in local municipalities to do enough for disaster preparedness. Not sexy, doesn't rise to top. Challenging to get money dedicated to emergency management.
 - Lobbying trips to try to bring additional dollars, resources, educational capacity. How to collaborate is important, but also a challenge.
 - Keeping your community educated and prepared (for flash flood in Boulder) is also a challenge. Most citizens become complacent.
- 2. Modeled major flood on Boulder Creek, after historic flood. Did dry run. But, with Katrina images receding where will we be? Major disasters help locals focus on their own vulnerabilities.
- 3. Disaster research is useful, could use help in digesting the information and putting it into effect.
- 4. Wild wire, flash flood. Seem to have good sense of what could happen.
- 5. City of Boulder have spent millions of dollars to understand dangers of flooding. Have also cooperated with research community, for a synergy of effort. Have worked on West Nile Virus. Heavy larvae spraying. Think we have a modal for the state. Way to do management without spraying chemicals in air. Research

this as an effective effort. Lucky in Boulder to be able to take effective approaches to unusual issues because of political climate, wealth, presence of the University's Natural Hazards Center, etc.

When wanting the attention of local officials, the most effective point of access would be the professional managers (e.g. city manager)

Suggest strong collaboration between states and their local municipalities. Implemental plans are probably dependent on this kind of support. How does that become possible?

Leadership is essential to risk taking.

Need for a megalithic site for access to all disaster management. Pulls information together and allows conversation between professionals in the field – collaborative effort for practitioners and others to see what's coming out of the research community. Need to get research into Cliff Note format. Get the mode of application up front, how is it relevant to the place of individual application.

Need to reach out and connect. Not just about sharing the research, it's also about exciting students, building strong and effective relationships between associations and government agencies.

Public Entity Risk Institute (PERI) – has portal <u>www.riskinstitute.org</u> This may be the type of site that you're describing...

Land Use Planners – is the same skill set as emergency manager world in many ways.

Create champions everywhere you go for disaster preparedness, awareness. Get voices working for this emergency field in every way possible. Build political will form the roots up. Be willing to go to your community, different venues, different configurations, police, fire, Lyons club, Chamber of commerce, etc. Be persuasive.

GENDER AND DISASTER ROUNDTABLE Wednesday, July 12, 2006

Conveners: Lori Peek, Colorado State University; Kristina Peterson, University of New Orleans

Originally convened by Betty Morrow in a closet about eight years ago - responsible for creating the Mary Fran Meyer Award.

We began by putting chairs in a large circle and introduced ourselves. I missed several individuals' names and information...

(Attendees included (partial list): Greg- Program Manager at Natural Hazards Center; Erica- Natural Hazards Center – currently working on gender issues at World Trade Center; Nnenia Campbell – University of Delaware; Sophia Liu – Natural Hazard Center student interested in Communication within disaster context with attention to gender; Betty Hearn Morrow - SocResearch Miami; Elaine Enarson - Brandon University in Manitoba. Part of National Team for Mad Cow Disease. World Sustainability. Gender Sourcebook developed by international team with emphasis on research pieces, body literature, gender and disaster bibliography, classes and courses. Contact if interested in being part of maintaining Sourcebook. What can we do to apply it? Spend some time with the Sourcebook and give input; Suzanne Frew – has her own business. Strong area is Risk Communication across cultures. Issues of faith traditions in decision-making. Works in Southeast Asia and here. Susan Cutter - University of South Training. Carolina. Geographer in Disaster Community, author. Joselin Landry – DHS/FEMA. NEPA compliance. Has background in Louisiana. Has worked with almost everyone here; Pat Skinner – cooperative extension with LSU; Betsy Garrison – LSU, Family Resilience and Disaster, Cheryl Childers – Washburn University; Alison Herring – Researcher/Grad University of North Texas; Shirley Laska – University of New Orleans - Urban Sociologist Strongest Predictor of Evacuation is Women. Responders are now thinking about class and race, but need to use gender as prime. Communication and information within a disaster context should be presented to women as those who will take action. Yet, also the largest category of victims in Katrina was elderly women. Gregory Button University of Michigan - Gender issues in disaster recovery. Role of women is essential to recovery. Women are the leaders in recovery efforts; Alison - Australia. Resilience in Gender; Kelly - Assessment results show gender issues. Australian method, define as Women's Business, Men's Business. Look at tasks before and after disasters; Jim Schwab - Chicago. Disaster Planning. Part of Grand Bayou team. Book: Deeper Shades of Green. Oriented to man-made environmental hazards.)

Lori Peak – CU Looking at Katrina survivors in particular looking at women and children's issues.

Kris Peterson – University of New Orleans. Urban Studies background and Divinity background. Trying to apply research to policy. CHART. PhD work now. NAACP roundtable. Set policies in race and gender. Find bridges with practitioners from researchers.

General conversation and sharing of ideas – didn't take notes.

WHAT ARE IDEAS FOR FUTURE PLENARY SESSIONS?

Plenary on building a social movement for implementation of research for justice...

Local people and what they are doing to make their neighborhoods sustainable.

Panels could have a gender speaker because gender is most statistically relevant demographic determiner in disaster issues.

How do we do participatory research? Community Resilience Index for example could be explained with a view to utilizing it in the field.

International perspectives on natural hazards and the sharing of information and lessons learned from different cultural perspectives.

How does innovation proceed in the Hazard community? We should ask objectively, "Why do practitioners not get it? Why doesn't change result in the face of empirical data? What are we doing? How can this be changed?"

PREPARING THE PUBLIC: EARTHQUAKE EDUCATION AND BUILDING LOCAL CAPACITY

Moderator: Sarah Nathe, University of California, Berkeley

Discussants: Arrietta Chakos, City of Berkeley, California; Richard Eisner, California Governor's Office of Emergency Services; N. Emel Ganapati, University of Miami; David Johnston, Institute of Geological and Nuclear Sciences, New Zealand

ARRIETA CHAKOS

City of Berkeley

Difficult to keep public engaged. People don't like to pay attention on a daily business to their own vulnerability.

Have taken responsibility to reduce risk. In Berkeley we have high taxes as result of hazard mitigation policies. Extensive retrofit effort. Tax rebate for retrofitting efforts. Reduction of risk in multi-units, schools, etc.

Tell the message of community safety through every method possible. Put out a great effort to get regular messages out. After Katrina there was receptivity by government officials to re-examine our policies. In the past, emergency budgets are routinely slashed because while seen as essential, not as immediate. After Katrina that perception changed.

Set up Katrina Resource Center for evacuees. Worked with Red Cross in developing coalition for assistance. Were given additional funds to buy extra supplies for safety, disaster caches in schools and public building. Reinvigorated emergency programs.

"Get Ready Berkeley Day" - Media outreach, and multi-sectorial campaign. Devised a precinct operation. Map.

Hired a campaign company. Slogan: "Get involved. Get Ready. No one's prepared until everyone is prepared." Reached 20,000 households with door hangers with magnetic element for within household posting.

Distribution of CERT information by volunteers: www.citizencorps.gov

RICH EISNER

Personal level of involvement develops within the local scope. From Sacramento the process remains more impersonal, remote obviously.

We are selling a product nobody wants - a bad tasting medicine. People don't like looking at their vulnerabilities.

Assessment of where we are in the state of California: Recently, governor's wife took on emergency preparedness as personal project. A campaign was developed without consulting research or practitioner community. There is a warehouse in Sacramento full of backpacks that are supposed to be kits for preparedness. (City of Berkeley expressed interest and willingness to purchase.)

None of us should ever show up in a line for assistance after a disaster.

The Bay Area Earthquake Preparedness Program – very successful and no longer in existence. FEMA funded, were able to hire researchers, practitioners, marketers to sell the message. Door hangers to coupons were utilized. Quarter of a million dollar budget to reach entire state, insufficient.

Are we effective in reaching who it is we need to be reaching? Need baseline measures, need to engage sociologists...

Credibility. Conflicting messages: "Get in the doorway." This has been a long time feature of their preparedness campaign and the ARC would not change the message because it would put their institution in an unfavorable light. They were more concerned with their institutional image and supposed credibility than with accuracy.

First aid, training. Trying to change behavior – doesn't need to be from single threat.

DAVID JOHNSTON

New Zealand Geological Survey Institute

World Bank Project in Istanbul, Turkey apartment buildings. 1999

Preliminary reports are showing great vulnerability of multi-level buildings within Turkey. Life safety in Turkey is a major vulnerability as a result of earthquakes - whereas in New Zealand there is risk of earthquake, but not threat to life in same way.

The project: Participants from apartment buildings, looked at buildings with residents, the owners. Crews went into their apartments and did examinations, core samplings from walls. There was also social interaction to reassure the residents because it is so disruptive to examine the construction.

Trust in others, funding and beliefs were linked and contributed to taking or not taking retrofitting action.

Trust: in designers, in builders, in Municipality

Funding: benefits and costs, Financial mechanisms and support

Beliefs: Risk perception and anxiety. Outcome expectancy and capability to act, perceived responsibility, improved property values consensus for retrofitting.

Retrofitting Action was the desired outcome.

Had assets, but no money to pay for retrofitting action. They wanted help with loans. Financing not accessible in Turkey the way it is in some countries. They were less than convinced that they could trust their builders and those people and companies doing retrofits. Construction of apartment buildings not to codes. For instance, concrete cores were off the scale in terms of inadequacy, no strength in concrete.

Campaign would have to be more than just tell them there's a hazard. Lack of trust probably the key issue. Need high-level buy-in with punishment element.

EMEL GANAPATI

University of Miami, Teaching interdisciplinary Originally from Turkey.

Death toll from 1999 Turkey Earthquake: 17,500 official Unofficial death toll would be 40,000 – 50,000

She went to a small town about hour and a half outside of Instanbul. Such damage in aftermath that the town was declared a "dead city."

One effort was helping women to make candles and establish economic recovery. Food. Housing aid. Some faith based...

Rescue teams and some teams to educate public:

This was all new. No existing organizations had been focused on disasters. Saw the roles of emotions in disasters clearly demonstrated – rescue teams could not save all the people who needed to be dug out. They were trying to use rocks and household utensils to save lives. Their political and social networks emerged within the context of strong paternal state. Whole image of a strong father state was shattered.

There has been a new popularity of civil societies in aftermath.

Who initiated these new emergency/education teams? Earthquake survivors who knew they had to do something. Began to try to distribute information. They were successful in that they had good information from their experiences. Worked with heads of neighborhoods to coordinate volunteers. Training from trailer that would come to the neighborhood with stocks for disaster rescue. Try to raise disaster awareness. People who received training were successful because of the neighborhood connections.

Unsuccessful teams were seen as having unsympathetic and superior approach that resulted in lack of trust. Their team perspective was that those they were serving were, "Beggars and parasites." The recipients of assistance.

Try to build on neighborhood structures. Try to listen and learn from locals. Put own opinions, even expert aside long enough to really hear, listen.

GRAND BAYOU REPRESENTATIVES:

The officials who are coming in to advise locals on evacuation:

Need to know the area. Be aware of that community's processes.

There must be a general education of the people in the community before a disaster. Give them information before the events to increase level of preparedness. We need open dialogue with government agents. We need to have access to people who are making decisions about our lives.

The evacuation routes have been mapped out by officials, but that information is not given to communities individually or effectively. We don't know the effective ways out and we don't know where evacuation centers are. None of this has been communicated to us. Who are the officials telling? Where is this information? We don't have it.

People need to get together and know what to do. We need provision along the way. Specifically gas and service for cars. We were half way on the road and without gas because we had been stuck on the highway 8-12 hours. Cars were breaking down and blocking traffic. There was no one to move the cars out of the way. That the cars broke down shouldn't be a surprise – there are old cars in that area.

QUESTION PERIOD

The youth especially need to be prepared – they have the concept of being immortal.

Synthesis – there are good education programs within countries like Switzerland, Australia, New Zealand. Can these be transferred? Education programs have been produced by NPR. There is a show with Big Bird. Instill information in 4th and 5th grade. Youth will take the material very seriously at young age. Compare to antismoking campaigns – very effective in reaching children and into their family. Working with young people is incredibly important. There is easy access through the

Working with young people is incredibly important. There is easy access through the school system and they have a ready belief and accept credibility.

GET TO KNOW YOUR NEIGHBORS may be one of the most effective tools for preparedness. People will connect with a new network after a disaster out of necessity - be connected before.

IMPORTANT TO CONNECT HUMAN BEINGS WITH HUMAN BEINGS

If we don't understand the communities, we don't really have an effective program.

Article: The Uses of Disaster

Author: Rebecca Solnit, Consultant

Heidi Taylor, American Red Cross Red Cross has "Masters of Disasters" K- 3 curriculum

Develop internet web sites that are of interest to kids.

Kim Shoaf

UCLA Center for Public Health and Disasters

Salt Lake, Utah has very effective disaster preparedness that operates through their churches.

Reaching out to faith based organization, university students (Greek counsel), schools, fire departments, business communities. Work incrementally and build coalitions. Political leaders begin to be pressured by the networks. Make use of anniversary dates.

Forget websites, brochures, and other literature because of lack of literacy.

People go to the people around them in a disaster. Where they are at the time. Look at the next tier of who people will turn to. What to do when the tsunami sirens go off? Hotel managers, business owners for tourists, seasonal workers. Harder to engage.

After education will have a decrease in perceived need to be prepared because they see the educators as having taken the responsibility. "Oh good, someone knows what to do."

PLENARY #3: THE STATE OF FEDERAL EMERGENCY MANAGEMENT

MODERATOR: Claire Rubin, Claire B Rubin and Associates

DISCUSSANTS: Michael Brown, Michael D. Brown and Associates; Craig Fugate, Florida Division of Emergency Management; Eric Holdeman, King County, Washington, Office of Emergency Management; Robert Zitz, DHS/Preparedness Directorate

Themes: FEMA should be abolished, FEMA should be fully vested in all aspects of emergency management, FEMA should be regionalized, etc.

Effectiveness. Who would you hire?

DHS might say: We will get out of the office more. Consult with state and local officials more. Listen, learn and read to existing body of knowledge. Societal aspects of disasters. Build more linkages with non-federal bodies. Seek out benefit from decades of research. Acknowledge there is knowledge and experience outside the beltway.

MICHAEL BROWN

Michael Brown and Assoc.

Keep doing your work: do let not let what happened to me deter you from public service. In January 4, 2005 sent to Asia to meet with leaders about tsunami. Told President after that we were not prepared for a catastrophic disaster. Frustrated that funding was not given, no priority

Michaelbrown@att.net

CRAIG FUGATE

Florida Division of Emergency Management

I'm an atheist to all of you professionals – I was originally a volunteer firefighter.

He is the accidental head of emergency management. He has viewed lots of plans and exercises from inside and saw messes in both.

Lieutenants: 1987 told to have some preparedness in place and were looking at hurricanes, etc. but also potential nuclear attack – no real concept of disaster preparedness.

Like Edison – can do 10,000 things before you learn what does and doesn't work.

Spending too much time deciding if FEMA should be an "innie or an outie" All this discussion about what FEMA should be will simply result in a print nightmare – "the agency formally known as FEMA."

FEMA discussion: Need to define what the outcome is, not simply what the structure will look like.

Look at outcomes: Define an outcome. Volunteers do rescue. Define your national plan that all levels of government will work together to save lives. Change outcomes.

Can have it FAST, MISTAKE FREE or COST EFFECTIVE. PICK ONLY ONE.

What is your OUTCOME? This is the bottom line.

ERIC HOLDEMAN

King County, Washington OEM http://www.metrokc.gov/prepare/

Row Boat analogy: Looking at where you've been and moving toward where your back is pointed. Need canoes and kayaks for the white water. Be forward thinking. Where are we going?

Recreate James Lee Witt era is one option. Return preparedness to FEMA, but keep within HDS.

Lots of laughing here – can't seem to stay focused on the typing... My notes will be missing some good points.

Creating two separate organizations will set things back. Keep all four phases (preparedness, response, recovery and mitigation) together.

Clash between political philosophy and facts.

Leadership: solution is not to have PhD in order to be the director of FEMA. What's needed is a person with a mix of skills. They must have the ability to lead in crisis. Experience and wisdom. When to activate.

When you're briefing your boss and he doesn't ask any questions, you need to realize that the lights are on, but nobody's home.

Hire: individuals with success. From state or large urban area. Not necessarily transferable. Entering whole other world at Federal level. We do not want the military in charge. The military is worn out.

So reuniting preparedness with FEMA is a given.

Keeping regional offices for FEMA has high value. Single most important thing is to make use of regional offices. It is important to keep institutional knowledge alive. Will take a long time to put back what we've lost in institutional knowledge.

QUESTIONS:

Build on what happened in Katrina – all information that was exposed during the disaster were gotten out there by the camera guys. Use the power of the camera. Talk to the beltway with the power of the media.

As long as mitigation only occurs when someone else is paying for it, it won't be enough.

Each government is what we deserve because we created it. The public must demand change. Path to leadership is that you have to create the demand. Can be worked from the bottom up - starts at level of locals. (eg. School district says "no" to using school as shelter because no funds, etc.) Put pressure on politicians to represent the needs

We are all voters, all constituents to someone. Engage your local officials. Move all the way up through the levels of government. Emergency management is all about relationships. (Eric Holdeman's eg. Spent time getting to know a local official who was going door to door, he eventually became state senator in a key position.)

What can we learn from this event (Katrina)?

Poor people get screwed in disasters. We have created a nation of victims. There are racist problems in New Orleans. Everything we do is geared for white and middle class. Until we get our blinders off, we will create a cycle of victims.

In Katrina there was not an organizational structure to address the communities who were most impacted. "We recognize that you are unable to take care of yourselves." No system for reaching or even identifying individuals in need.

Should not subcontract out emergency management or aspects of things best handled by government workers who maintain institutional knowledge.

Can't contract out leadership. Contract out ice. What are our core competencies? Why do I need a federal backhoe? What I need is the team who knows how to position and make use of the backhoe in an effective way.

"Everyone is responsible for emergency preparedness."

Become individually prepared for a disaster and convince those around you to prepare.

Mitigation: do we work to morph mitigation into something viable?

There is an important four-element cycle. Shouldn't be broken down. Each element important: preparedness, response, recovery AND mitigation.

Mitigation hasn't died, just has less funding than any of us want. Who's paying? Why is it only in the public interest if it happens after a disaster?

The insurance agencies are involved. Mitigation is best driven by insurance companies unwillingness to insure.

Culture of secrecy that came in after Homeland Security;

The more you try to protect the public by withholding information, the more you create an untrustworthy leadership presence. Counterproductive.

Look at this field from a social science position. Can you take people who daily "follow the rules" (are legalistic and formula oriented) and expect them to work well in a disaster response environment? That may not work. But, effective emergency management depends on relationships. Professional relationships have the potential for growth and stability within the institutional framework.

Fundamentally the locals are responsible for preparedness. How does this work well? Assign emergency management to a full time position – don't split up.

There are 3,000 counties in the United States – many don't have a full-time emergency management person.

During a Disaster: If you just have staff level people working at the Emergency Operations Center (EOC) then will have limited success. Need to have the community's leaders, people with large scale vested interest in the outcome staffing the EOC during a disaster.

The private sector has a vested interest – get them to drive public awareness and change.

The United States is arrogant. We are not prepared to rrecieve help from foreign governments.

We all need to get involved in a disaster to gain experience.

Will State and Federal leaders be there to help? How to build support?

The lack of interest in mitigation is puzzling, gloomy. We need to work locally to get officials involved. The State of Florida spends its own dollars on mitigation regardless of Federal dollars.

Plow the ground and plant the seed. Jump on opportunities. Employ the media.

Lack of coordination in planning issues: Land use planning key in long term sustainability

Center for Hazards Assessment and Technology (CHART) at the University of New Orleans (UNO) has re-established itself with office space. Shirley Laska extends an invitation to all in the natural hazards community to come visit - there's an empty desk. http://www.uno.edu/orsp/centers/centers.html#chart